AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Currently Amended) A drug delivery device comprising:

a catheter or syringe having a distal portion, and

a needle attached to the distal portion, the needle comprising during use:

a shaft having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft,

wherein the distal-most end is a curvilinear blunt tip.

2. (Currently Amended) The needle of claim 1, wherein the distal end comprises opposing first and second surfaces and the first surface is indented towards the second surface to form a concavity on an outer portion of the first surface.

3. (Original) The needle of claim 1, wherein the distal end of the shaft comprises at least one port on a side surface thereof.

4. (Canceled)

5. (Original) The needle of claim 1, wherein the distal end of the shaft is tapered.

6-12. (Canceled)

13. (Currently Amended) A method of delivering a therapeutic agent to a target site of a body comprising:

providing a ~~the~~ drug delivery device ~~of claim 1 containing a therapeutic agent~~ comprising:

a non-coring needle having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal end comprising a first surface indented towards a second surface to form a concavity on an outer portion of the first surface,

the second surface being parallel to the longitudinal axis of the shaft,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft;

puncturing a body tissue with the non-coring needle tip; and

delivering the therapeutic agent through the non-coring needle to a target site of a body.

14. (Canceled)

15. (Original) The method of claim 13, wherein the target site is selected from a group consisting of the heart, lung, brain, liver, skeletal muscle, smooth muscle, kidney, bladder, intestines, stomach, pancreas, ovary, prostate and cartilage.

16. (Original) The method of claim 13, wherein delivering the therapeutic agent comprises directly delivering the therapeutic agent to the target site.

17. (Currently Amended) A method of accessing a drug delivery port comprising:

providing a ~~the~~ drug delivery device ~~of claim 1~~ comprising:

a non-coring needle having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal end comprising a first surface indented towards a second surface to form a concavity on an outer portion of the first surface,

the second surface being parallel to the longitudinal axis of the shaft,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft; and

inserting the needle of the drug delivery device into a drug delivery port to access the drug delivery port.

18. (Original) The method of claim 17, wherein accessing the drug delivery port comprises introducing a therapeutic agent through the needle into the drug delivery port.

19. (Canceled)

20. (Original) The method of claim 17, wherein the drug delivery port comprises a septum, the needle of the drug delivery device piercing the septum to access the drug delivery port.

21. (Currently Amended) ~~A~~ The method of claim 13, wherein the target site is ~~delivering a therapeutic agent to~~ a spinal column ~~comprising: providing the drug delivery device of claim 1 containing a therapeutic agent; and introducing the therapeutic agent through the needle into a spinal column~~.

22. (Currently Amended) A method of collecting a fluid sample from a body comprising:

providing a ~~the~~ drug delivery device ~~of claim 1~~ comprising:

a non-coring needle having a distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal end comprising a first surface indented towards a second surface to form a concavity on an outer portion of the first surface,

the second surface being parallel to the longitudinal axis of the shaft,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft;

puncturing a body tissue with the non-coring needle;

inserting the needle into a fluid containment site of a body; and

creating a vacuum in the drug delivery device to collect a fluid sample from the fluid containment site of the body.

23. (Original) The method of claim 22, wherein the fluid sample comprises blood, amniotic fluid, serous fluid, or cerebrospinal fluid.

24-31. (Canceled)

32. (Currently Amended) The needle of claim 36 [[2]], wherein the distal opening is a U-shape.

33. (Currently Amended) The needle of claim 34 [[2]], wherein the second surface is parallel to the longitudinal axis of the shaft.

34. (Currently Amended) A drug delivery device comprising:

a catheter or syringe having a distal portion, and

a needle attached to the distal portion, the needle comprising during use:

a shaft having a ~~tapered~~ distal end comprising a first surface indented towards a second surface to define a distal opening having a U-shape when viewed from the distal end,

the shaft having a longitudinal axis extending through the distal opening,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft.

35. (Currently Amended) ~~The needle of claim 34, wherein the distal opening is closed along a portion thereof.~~ A drug delivery device comprising:

a catheter or syringe having a distal portion,

a needle attached to the distal portion, the needle comprising during use:

a shaft having a distal end comprising a first surface indented towards a second surface to define a discontinuous distal opening, thereby forming a concavity on an outer portion of the first surface,

said distal opening having a generally U-shaped configuration when viewed from the distal end,

the shaft having a longitudinal axis extending through the distal opening,

the distal opening having a cross-sectional area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft.

36. (Currently Amended) A needle comprising:

a catheter or syringe having a distal portion, and

a needle attached to the distal portion, the needle comprising during use:

a shaft having a ~~tapered~~ distal end defining a distal opening and having a longitudinal axis extending through the distal opening,

the distal end comprising a first surface ~~only~~ indented towards a second surface to form a concavity on an outer portion of the first surface,

the second surface being parallel to the longitudinal axis of the shaft,

the distal opening having a projected area that is smaller than a cross-sectional area of a section of the shaft proximal to the distal end of the shaft.

37. (Cancelled)

38. (Cancelled)

39. (New) The needle of claim 34, wherein the distalmost end is a curvilinear blunt tip.

40. (New) The needle of claim 35, wherein the distalmost end is a curvilinear blunt tip.

41. (New) The needle of claim 36, wherein the distalmost end is a curvilinear blunt tip.

42. (New) The needle of claim 34, wherein the distal end of the shaft comprises at least one port on a side surface thereof.

43. (New) The needle of claim 35, wherein the distal end of the shaft comprises at least one port on a side surface thereof.

44. (New) The needle of claim 36, wherein the distal end of the shaft comprises at least one port on a side surface thereof.

45. (New) The method of claim 16, wherein the target site is the heart.

46. (New) The method of claim 16, wherein the target site is the myocardium.